

ABSTRACT

Co-administration of a lysostaphin or other anti-staphylococcal agent which cleaves cross-links of peptidoglycans of staphylococci cell walls such as lysostaphin and an antibiotic effective against staphylococci due to antibiotic activity mediated by cell-wall activity is effective against staphylococcal infection, even staphylococci that may be 5 resistant to one or other of lysostaphin or the cell-wall active antibiotic. Co-administration simultaneously suppresses the generation of antibiotic-resistant mutant strains. Effective cell-wall active antibiotics include β -lactams and glycopeptides.